

Amendments to the Claims

Applicant cancels claims 60-78 and 85; and amends claims 81-84 and 86-91. Accordingly claims 79-84 and 86-91 remain pending upon entry of the present amendment. Changes to the claims are provided in the below listing of claims for the convenience of the Examiner.

Listing of Claims

1-78 (canceled)

79. (Previously presented) A blocking reagent, wherein the blocking reagent has at least one photoreactive group for covalent immobilization on a sensor surface.

80. (Previously presented) A blocking reagent as recited in claim 79, wherein the blocking reagent is selected from the group consisting of casein, hydrolyzed casein, a surfactant, bovine serum albumin, fetal calf serum, newborn calf serum, and mixtures thereof.

81. (Currently amended) A blocking reagent as recited in claim 80, wherein the surfactant is selected from the group consisting of sodium palmitate, ~~Brij®~~ BRIJ 35, ~~Brij®~~ BRIJ 58, cetylpyridinium chloride monohydrate, cetyltrimethylammonium bromide, 3-[(3-cholamidopropyl)dimethylammonio]-1-propanesulfonate, 3-[(3-cholamidopropyl)dimethylammonio]-2-hydroxy-1-propanesulfonate, decane-1-sulfonic acid sodium salt, N,N-bis-[3-(D-gluconamido)propyl]deoxycholamide, dodecane-1-sulfonic acid sodium salt, dodecyl- β -D-maltoside, 6-O-(N-heptylcarbamoyl)methyl- α -D-glucopyranoside, heptane-1-sulfonic acid sodium salt, N-lauroylsarcosine sodium salt, octanoyl-N-methylglucamide, N-nonaoyl-N-methylglucamide, sodium cholate, sodium deoxycholate, nonane-1-sulfonic acid sodium salt, Nonidet P40, octane-1-sulfonic acid sodium salt, n-octyl- β -D-glucopyranoside, pentane-1-sulfonic acid sodium salt, n-octyl- β -D-thioglucopyranoside, ~~Pluronic®~~ PLURONIC F-68, saccharose monolaurate, sodium

dodecyl sulfate, N-dodecyl-dimethyl-3-ammonio-1-propanesulfonate, N-tetradecyl-dimethyl-3-ammonio-1-propanesulfonate, Triton® TRITON X-100, and mixtures thereof.

82. (Currently amended) A blocking reagent as recited in claim 79, wherein ~~said minimum of the~~ at least one photoreactive group is selected from ~~among the group consisting of~~ benzophenone ~~and or a derivative~~[[s]] thereof, anthraquinone ~~and or a derivative~~[[s]] thereof, thymidine ~~and or a derivative~~[[s]] thereof, and 4-azidobenzoic acid ~~and or a derivative~~[[s]] thereof.

83. (Currently amended) A method for the production of a blocking reagent, ~~at least one blocking reagent as recited as recited in claim 79 is reacted~~ comprising providing a blocking compound selected from the group consisting of casein, hydrolyzed casein, a surfactant, bovine serum albumin, fetal calf serum, newborn calf serum, and a mixture thereof; and reacting the blocking compound with at least one crosslinker that possesses at least one photoreactive group.

84. (Currently amended) The method as recited in claim 83, wherein ~~the minimum of the~~ at least one photoreactive group is selected from ~~among the group consisting of~~ benzophenone or a derivative[[s]] thereof, anthraquinone or a derivative[[s]] thereof, thymidine or a derivative[[s]] thereof, and 4-azidobenzoic acid or a derivative[[s]] thereof.

85. (Canceled)

86. (currently amended) Use of a blocking reagent comprising at least one photoreactive group for covalent immobilization on a sensor surface in a [[A]] method for producing a sensor surface, the method comprising the following steps:

(a) covalent immobilization of ~~the~~ probe molecules on the sensor surface, wherein the probe molecules are capable of specific interaction with at least one biomolecule to be detected; and

(b) covalent immobilization of the blocking reagent ~~comprising at least one photoreactive crosslinker with at least one photoreactive group~~ onto the sensor surface by irradiation ~~to produce a sensor surface with covalently immobilized specific probe molecules for at least one biomolecule to be detected,~~

wherein positions on or regions of the sensor surface that are available in principle for nonspecific binding are inactivated by the at least one blocking reagent covalently immobilized thereon.

87. (Currently amended) Use of the blocking reagent A method as recited claim 86, wherein said photoreactive group is selected from the group consisting of benzophenone ~~and~~ or a derivative[[s]] thereof, anthraquinone ~~and~~ or a derivative[[s]] thereof, thymidine ~~and~~ or a derivative[[s]] thereof, and 4-azidobenzoic acid ~~and~~ or a derivative[[s]] thereof.

88. (Currently amended) Use of the blocking reagent A method according to claim 86, wherein the sensor surface is selected from the group consisting of metal, semimetal, semimetal oxide, glass, and polymer surface.

89. (Currently amended) Use of the blocking reagent A method according to claim 86, wherein said probe molecule is a partner in a specific receptor/ligand interaction system.

90. (Currently amended) Use of the blocking reagent A method according to claim 86, wherein said blocking reagent is selected from the group consisting of casein, hydrolyzed casein, a surfactant, bovine serum albumin, fetal calf serum, newborn calf serum, and mixtures thereof.

91. (Currently amended) Use of the blocking reagent in the [[A]] method according to claim 90, wherein said surfactant is selected from the group consisting of sodium palmitate, Brij® BRIJ 35, Brij® BRIJ 58, cetylpyridinium chloride monohydrate, cetyltrimethylammonium bromide, 3-[(3-cholamidopropyl)dimethylammonio]-1-propanesulfonate, 3-[(3-cholamidopropyl)dimethylammonio]-2-hydroxy-1-propanesulfonate, decane-1-sulfonic acid sodium salt, N,N-bis-[3-(D-gluconamido)propyl]deoxycholamide, dodecane-1-sulfonic acid sodium salt, dodecyl-β-D-maltoside, 6-O-(N-heptylcarbamoyl)methyl-α-D-glucopyranoside, heptane-1-sulfonic acid sodium salt, N-lauroylsarcosine sodium salt, octanoyl-N-methylglucamide, N-nonaoyl-N-methylglucamide, sodium cholate, sodium deoxycholate, nonane-1-sulfonic acid sodium salt, Nonidet P40, octane-1-sulfonic acid sodium salt, n-octyl-β-D-glucopyranoside, pentane-1-sulfonic acid sodium salt, n-octyl-β-D-thioglucopyranoside, Pluronic® PLURONIC F-68, saccharose monolaurate, sodium dodecyl sulfate, N-dodecyl-dimethyl-3-ammonio-1-propanesulfonate, N-tetradecyl-dimethyl-3-ammonio-1-propanesulfonate, Triton® TRITON X-100, and mixtures thereof.